

Title (en)
IMPLANTABLE SENSOR FOR MEASURING AND MONITORING INTRAVASCULAR PRESSURE, SYSTEM COMPRISING SAID SENSOR AND METHOD FOR OPERATING THEREOF

Title (de)
IMPLANTIERBARER SENSOR ZUR MESSUNG UND ÜBERWACHUNG DES INTRAVASKULÄREN DRUCKS, SYSTEM MIT BESAGTEM SENSOR UND VERFAHREN ZUM BETRIEB DAVON

Title (fr)
CAPTEUR IMPLANTABLE PERMETTANT DE MESURER ET DE SURVEILLER LA PRESSION INTRAVASCULAIRE, SYSTÈME COMPRENANT LEDIT CAPTEUR ET SON PROCÉDÉ DE FONCTIONNEMENT

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Abstract (en)
The invention relates to an implantable pressure sensor for measuring pressure, comprising a hermetic capsule (3) with a partially flexible portion; an electronic circuit (4) housed in the capsule (3) generating a transduction pressure signal dependent on the absolute pressure outside the capsule (3); an electrode pair (5, 5') connected to the electronic circuit (4). The electronic circuit (4) comprises: a digital control unit (29); an interrogation stage (25) receiving an interrogation signal transmitted by volume conduction to the electrode pair (5, 5'), to generate a transduction pressure signal and to transmit it to a medium (15); and a power transferring stage (9) receiving part of the interrogation signal power and transferring power to the digital control unit (29) and to the interrogation stage (25). The invention further comprises a system comprising one or more pressure sensors and a reading unit; and the method for interrogating and powering said system.

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